PATENT COOPERATION TREATY

From	i the RNATIONAL SEA	RCHING AUTH	ORITY		REC'D 2 0 OCT 2004			
To:				•	PC PC			
	see form	PCT/ISA/220		INTERNATION	TEN OPINION OF THE NAL SEARCHING AUTHORITY PCT Rule 43 <i>bis</i> .1)			
				Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet)				
1	icant's or agent's file form PCT/ISA/2:			FOR FURTHER A See paragraph 2 below				
PC	national application I T/IB2004/050478		International filing date (c 21.04.2004	22.04.2003				
International Patent Classification (IPC) or both national classification and IPC G06K19/073, G07F7/10, H04L9/06, \$6\$\frac{21}{20}\$0								
Appl KOI	icant NINKLIJKE PHIL	IPS ELECTRO	ONICS N.V.					
1.								
	Box No. II	Basis of the op Priority	IIIIOff					
	☐ Box No. III	Non-establishn	nent of opinion with rega	ard to novelty, inventive	step and industrial applicability			
	☐ Box No. IV	Lack of unity of		, , , , , , , , , , , , , , , , , , , ,				
	⊠ Box No. V	Reasoned state	ement under Rule 43 <i>bis</i>	:1(a)(i) with regard to novelty, inventive step or industrial supporting such statement				
	☐ Box No. VI	Certain docume		oopporting ooon state	ment			
	Box No. VII	Certain defects	in the international app	lication				
	☐ Box No. VIII	Certain observa	atlons on the Internation	al application				
2.	FURTHER ACTIO	ON						
	the applicant cho	usually be considered to be a bwever, this does not apply where hosen IPEA has notifed the onal Searching Authority						
	If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of malling of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.							
	For further options, see Form PCT/ISA/220.							
3.	3. For further details, see notes to Form PCT/ISA/220.							
Name	and mailing address	s of the ISA:		Authorized Officer				

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2004/050478

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_	Во	x N	p. I Basis of the opinion			
1.	With regard to the language, this opinion has been established on the basis of the international application in the language in which it was field, unless otherwise indicated under this item.					
		lar	is opinion has been established on the basis of a translation from the original language into the following iguage , which is the language of a translation furnished for the purposes of international search inder Rules 12.3 and 23.1(b)).			
2.	. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:					
	a. type of material:					
			a sequence listing			
			table(s) related to the sequence listing			
	b. format of material:					
	İ		in written format			
	□ in computer readable form		in computer readable form			
	c. time of filling/furnishing:					
	i		contained in the international application as filed.			
	١		filed together with the international application in computer readable form.			
	ļ		furnished subsequently to this Authority for the purposes of search.			
3.		ha	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto is been filed or furnished, the required statements that the information in the subsequent or additional ples is identical to that in the application as filed or does not go beyond the application as filed, as propriate, were furnished.			
4.	Additional comments:					

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2004/050478

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	Box No. II Priority							
1.	☐ The following document has not been furnished:							
		☐ copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).				priority has been claimed (Rule 43bis.1 and 66.7(a)).		
			translation of the e	arlier appl	ication wh	nose priority has been claimed (Rule 43bis.1 and 66.7(b)).		
	Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.							
2.	This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43 <i>bis</i> .1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.							
3.	Add	itional o	bservations, if nece	essary:				
	Box	No. V	Reasoned state	ment und	er Rule 4:	3bis.1(a)(l) with regard to novelty, inventive step or		
			pplicability; citati	ons and e	xplanatio	ons supporting such statement		
1.	State	ement						
	Nov	elty (N)		Yes:	Claims	2-6		
			No:	Claims	1,7			
	Inventive step (IS)			Yes:	Claims	3,4		
			No:	Claims	1,2,5-7			
	Industrial applicability (IA)		Yes:	Claims	1-7			
				No:	Claims			
2	Citat	ione an	d evalenations					
۲.	2. Citations and explanations							
	see	separal	te sheet					
	Box	No. VII	Certain defects	in the int	ernationa	al application		

The following defects in the form or contents of the international application have been noted:

see separate sheet

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/IB2004/050478

The following documents are cited:

D1: US 6,498,404 (corresponding to WO 00/26746 cited in the application)

D2: DE 198 28 936

Ad V.2 - novelty, inventive step; citations and explanations

- The application relates to the protection of a chip card against differential power analysis: The power supply current consumed by the card may be used to identify secret information which is processed inside the card. The problem is to provide a flexible, effective means for cloaking of the effect of the secret information on the power supply current. The solution is to use an activity monitor, which evaluates pairs of processing signals that come into and out of processing circuits that process secret information. These measurements of the activity monitors are added and used to control the cloaking current that is drawn from the power supply so as to cloak the dependency on the secret information. The glst of the invention is that the excess current generated by the cloaking circuit depends on the processing actually done in the card.
- However, it appears that the difference between the invention and the prior art is not yet fully expressed in the independent claims. As a consequence, also the known solution of D1 falls under claim 1.

From D1 a chip card with obscured power consumption is known which uses a load circuit to draw an additional supply current in parallel with the secret information dependent supply current. A complementary circuit is used in addition to the circuitry that draws secrets information dependent power supply current. Both circuits contain similar circuit elements; in each clock cycle, complementary logic level changes are made in the complementary circuits so that the number of logic level changes in combination of both circuits does not change. Hence, the supply current does not depend on data which are actually processed.

D1 discloses

- an electronic device for executing operations dependent on secret information (D1, col. 1, from line 12), the device comprising
- power supply connections (see D1, Fig. 1, and col. 2, from line 24)
- a processing unit (see Fig. 2) with a plurality of processing circuits (such as AND-gate 5) for use in execution respective parts of the operations dependent on the secret information (obviously AND-gate 5 in D1 handles security relevant information), the processing circuit being fed from the power supply connections (this is implicitly disclosed in D1: the AND-gate 5 could not work without appropriate power supply)
- an activity monitor circuit (inverters 6, 7 with AND-gate 8) coupled to receive pairs of processing signals (see Fig. 2: the monitoring circuit receives two signals) coming into (into gate 5) and out of (obviously, the two signals are output signals of any upstream

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logic gates in Fig. 2) respective ones of the processing circuits, the monitor circuit being arranged to derive activity information (the logic signals being high or low) from each pair of processing signals, and to derive from the activity information a combined activity signal indicative of a sum of power supply currents that will be consumed by the processing circuits dependent on the processing signals (the two input signals are indicative of the current drawn by AND-gate 5),

- a current drawing circuit (AND-gate 8) connected to the power supply connections (again, implicitly disclosed: gate 8 could not work properly without power supply) and controlled by the activity monitor circuit to draw a cloaking current (additional ANDgate 8 serves to consume electrical current) controlled by the combined activity signal, so that power supply current variations dependent on the secret information are cloaked in combination of the cloaking current and the current drawn by the processing circuit (col. 3, lines 7-13).

As a consequence, the subject matter of claim 1 lacks novelty (Art. 33 (2) PCT) over D1. A similar objection applies to claim 7. Any difference between the invention and D1 is not clearly defined in all independent claims.

- 3. The different components defined in claims 2, 5 and 6 are obviously present in any electronic computer circuit. Even if this is not disclosed in D1, it is straightforward for a skilled person to include these modules in the circuit of D1. Therefore these claims add nothing inventive.
- 4. The pipelining arrangement defined in **claims 3 and 4** is not suggested by the prior art documents on hand.
- 5. D2 describes another possibility to protect a chip card or other electronic component against differential power analysis: capacitors are randomly connected to the supply voltage in order to cloak the supply current; this may only be done during encoding/decoding (col. 2, lines 15-18). Alternatively or in addition, the CPU may perform additional calculations based on random numbers which have no influence on the actual en-/decoding. Therefore the capacitors of D2 (Fig. 1) serve as a current drawing circuit as defined in claim 1 of the present application. D2 suggests to limit the cloaking to certain operating steps (col. 2, lines 15-18), which means that there has to be an activity monitor circuit which activates the capacitors and the random number generator as soon as the processor deals with security relevant data. Therefore this document discloses a security system very close to that of the application.

Certain defects (form and content, Rules 5 - 7 PCT)

4. The independent claims are not in the two-part-form (Rule 6.3b PCT).

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/IB2004/050478

5. D2 is not acknowledged in the description (Rule 5.1a PCT).

ANSWER 8 OF 16 USPATFULL

ACCESSION NUMBER: 95:112350 USPATFULL

Prolonged release microcapsule TITLE:

INVENTOR(S): Okada, Hiroaki, Osaka, Japan Ogawa, Yasuaki, Osaka, Japan

Yashiki, Takatsuka, Hyogo, Japan

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Osaka, Japan

(non-U.S. corporation)

NUMBER KIND DATE -----PATENT INFORMATION: US 5476663 19951219

APPLICATION INFO.: US 1994-228452 DISCLAIMER DATE: 20070417

Continuation of Ser. No. US 1991-748423, filed on 22 RELATED APPLN. INFO.:

Aug 1991, now abandoned which is a division of Ser.

No.

US 1990-469784, filed on 24 Jan 1990, now patented, Pat. No. US 5061492 which is a division of Ser. No. US 1987-103117, filed on 30 Sep 1987, now patented, Pat. No. US 4917893 which is a division of Ser. No. US 1986-940614, filed on 11 Dec 1986, now patented, Pat. No. US 4711782 which is a division of Ser. No. US 1984-667096, filed on 1 Nov 1984, now patented, Pat.

19831104

19940415

(8)

No. US 4652441

NUMBER DATE -----

PRIORITY INFORMATION:

JP 1983-207760 DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Lovering, Richard D. LEGAL REPRESENTATIVE:

Foley & Lardner

NUMBER OF CLAIMS:

L20 ANSWER 4 OF 4 USPATFULL

CLM What is claimed is:

. 21. A granular delayed-release form of pharmaceutically active substances according to claim 13, characterised in that the active substance is **pridinol** or a pharmaceutically acceptable salt thereof.

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L20 ANSWER 4 OF 4 USPATFULL

ACCESSION NUMBER: 88:13087 USPATFULL

TITLE: Granular delayed-release form of pharmaceutically

active substances

INVENTOR(S): Ventouras, Kimon, Le Lignon, Switzerland

PATENT ASSIGNEE(S): Zyma SA, Nyon, Switzerland (non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 4728513 19880301
APPLICATION INFO.: US 1986-888610 19860723 (6)

NUMBER DATE

PRIORITY INFORMATION: GB 1985-19310 19850731

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Schofer, Joseph L. ASSISTANT EXAMINER: Kulkosky, Peter F.

LEGAL REPRESENTATIVE: Glynn, Michael W., Fishman, Irving M.

NUMBER OF CLAIMS: 22 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 11 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 702

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s 19/clm 2 ROFECOXIB/CLM 2 VIOXX?/CLM 375 MK/CLM 9 MKS/CLM 384 MK/CLM ((MK OR MKS)/CLM) 3 0966/CLM 0 MK-0966/CLM ((MK(W)0966)/CLM) L21 4 (ROFECOXIB/CLM OR VIOXX?/CLM OR MK-0966/CLM) => d ncl 1-4 L21 ANSWER 1 OF 4 USPATFULL NCLM: 128/898.000 NCL L21 ANSWER 2 OF 4 USPATFULL NCLM: 514/438.000 NCL NCLS: 514/568.000 ANSWER 3 OF 4 USPATFULL L21 NCLM: 514/211.120 NCL 514/213.010; 514/411.000; 514/412.000; 514/433.000 MCLS: L21 ANSWER 4 OF 4 USPATFULL

NCLS: 514/226.500; 514/406.000; 514/473.000

NCL

NCLM: 514/248.000

=> s 12/clm

4 PRIDINOL/CLM

O PRIDINOLUM/CLM

T-20

4 (PRIDINOL/CLM OR PRIDINOLUM/CLM)

=> d ncl 1-4

L20 ANSWER 1 OF 4 USPATFULL

NCL NCLM: 540/589.000

NCLS: 548/500.000; 564/045.000; 564/213.000

L20 ANSWER 2 OF 4 USPATFULL

NCL NCLM: 424/464.000

NCLS: 424/480.000; 424/489.000

L20 ANSWER 3 OF 4 USPATFULL

NCL NCLM: 264/122.000

NCLS: 264/211.110; 264/211.230; 264/349.000

L20 ANSWER 4 OF 4 USPATFULL

NCL NCLM: 424/461.000

NCLS: 424/468.000; 424/480.000; 424/495.000; 424/676.000; 424/679.000;

514/062.000; 514/081.000; 514/089.000; 514/100.000

=> d ti 1-4

L20 ANSWER 1 OF 4 USPATFULL

TI Method for inducing crystalline state transition in medicinal substance

L20 ANSWER 2 OF 4 USPATFULL

TI Cushioning beads and tablet comprising the same capable of forming a suspension

L20 ANSWER 3 OF 4 USPATFULL

TI Method of manufacturing wax matrices

L20 ANSWER 4 OF 4 USPATFULL

TI Granular delayed-release form of pharmaceutically active substances

/

L19 ANSWER 9 OF 9 PCTFULL COPYRIGHT 2001 MicroPatent

ACCESSION NUMBER:

1999013799 PCTFULL

TITLE (ENGLISH):

SYNERGISTIC ANALGESIC COMBINATION OF OPIOID

ANALGESIC AND

CYCLOOXYGENASE-2 INHIBITOR

TITLE (FRENCH):

COMBINAISON ANALGESIQUE SYNERGIQUE D'

ANALGESIOUE OPIOIDE ET

D'INHIBITEUR DE CYCLOOXYGENASE-2

BURCH, Ronald, M.; GOLDENHEIM, Paul, D.; SACKLER, INVENTOR(S):

Richard, S.

PATENT ASSIGNEE(S):

EURO-CELTIQUE, S.A.

LANGUAGE OF PUBL.:

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LANGUAGE OF FILING: DOCUMENT TYPE:

Patent

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KIND NUMBER

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A1 19990325

DESIGNATED STATES:

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT

BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.:

WO 1998-US19516

19980917

PRIORITY (ORIGINAL):

US 1997-60/059195

19970917